

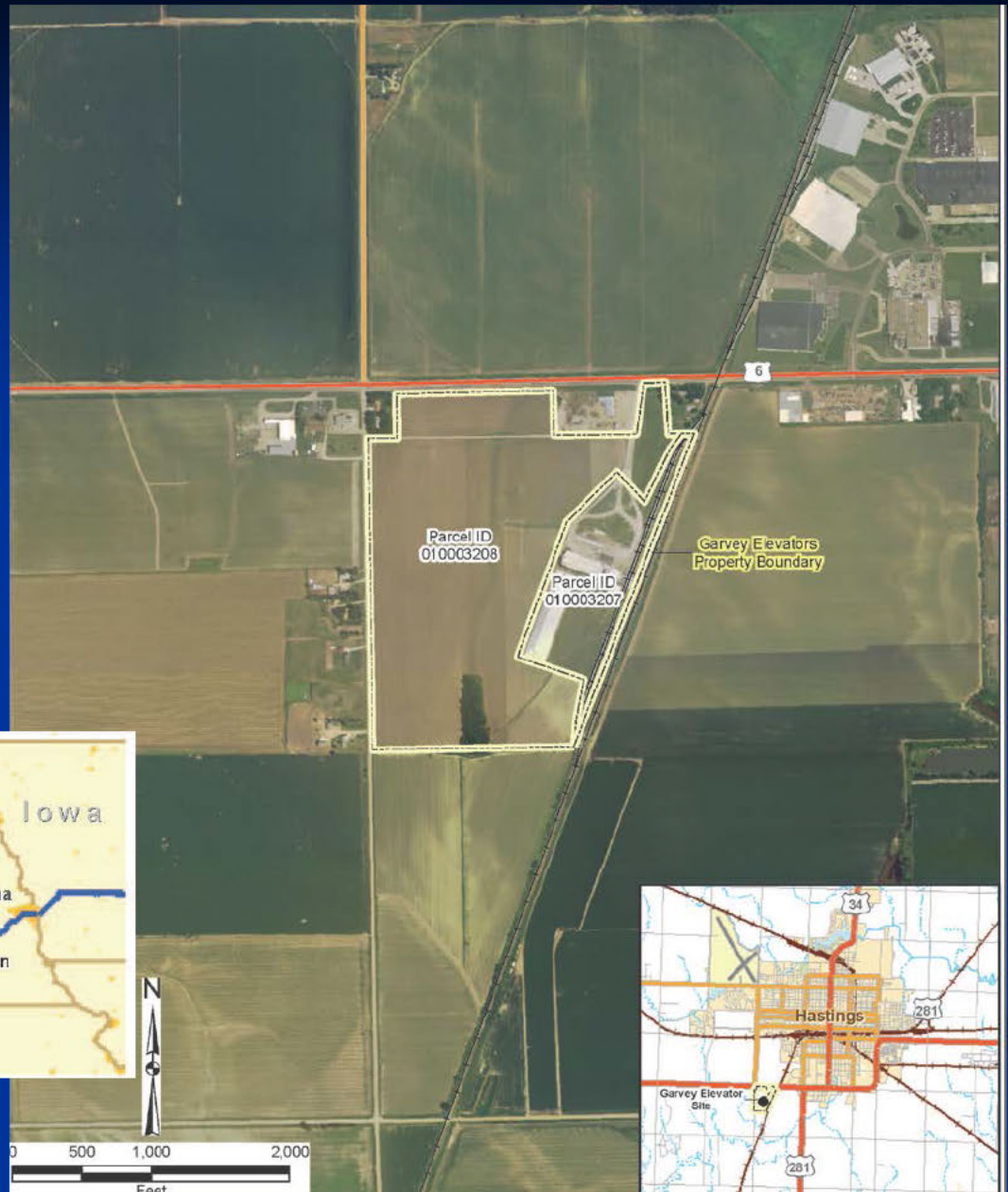
# Garvey Elevator Superfund Site Operable Unit 01



Hastings, NE



# Site Location

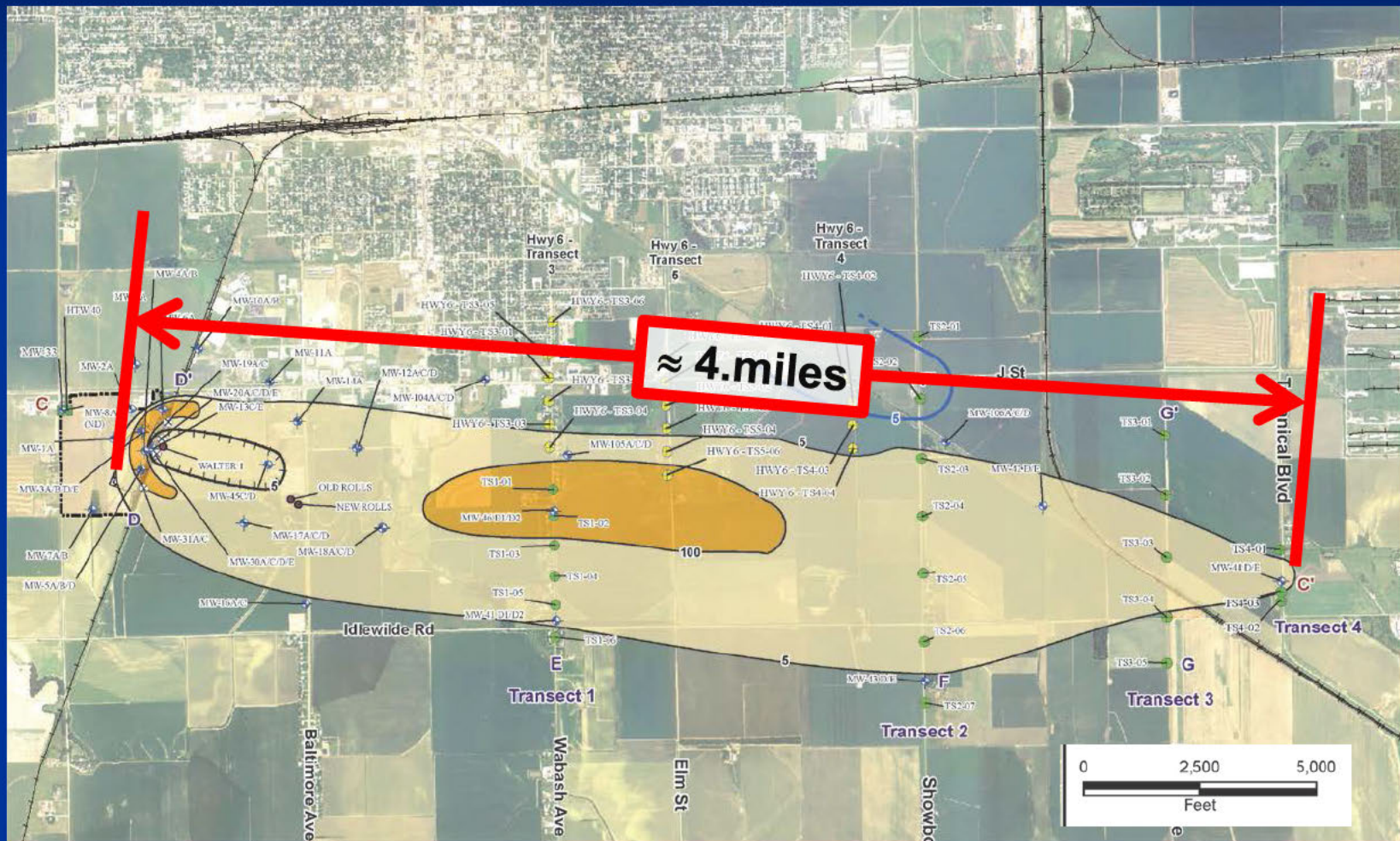


# Site Map





# Garvey Plume Extent



# Site Ownership / Operation

- **Former Owner/Operator:**
  - **Garvey Elevators, Inc. (Garvey)**
- **Current Owner/Operator**
  - **Ag Processing Inc (AGP®)**
  - **Currently not considered a PRP**



# Site History

- '95 – Garvey enters Nebraska VCP
- '97 – Municipal well impacted
- '99 – Garvey installs SVE and GET systems  
≈ 2,100 lbs of CCl<sub>4</sub> removed
- '02 – Garvey exits VCP
- '03 – NDEQ performs PA/SI
- '05 – Listed on NPL
- '05 - Garvey enters AOC for Removal and RI/FS
- March/May '08 – Garvey Ch 7 bankruptcy / EPA takeover of removal and remedial actions

# GET and SVE Systems (existing)



## GET

- 8 extraction wells
- PAC tower
- 2 injection wells

## SVE

- 8 SVE wells
- Thermal desorption unit

# Contaminant Characteristics (OU 1)

- Exposure Point Concentration (95% UCL)
  - 816 ug/l carbon tetrachloride ( $\text{CCl}_4$ )
  - 135 ug/l chloroform ( $\text{CHCl}_3$ )
  - Future resident exposed to GW from well
- Toxicity
  - COCs - likely to be carcinogenic (IRIS)
- Volume
  - Contain gw contaminant source area
  - Treat 380 mil gal (49 mil  $\text{ft}^3$ ) gw in 2-yr Interim RA



# Contaminant Mobility

- Aquifer conducive to transport of COCs
  - Thick, conductive, extensive S & G aquifer
- Contaminant mobility
  - $\text{CCl}_4$  has high solubility relative to its MCL
- ICs – none downgradient of OU 1
- Physical Controls (under EPA removal)
  - GET containing source area gw and preventing off-site migration
  - SVE reducing impacts to gw

# Risks to Human Population

- Scenario - future resident exposure to groundwater
- Exposure Area – 33 acre zone east of OU 1
- Potential Exposures – 99 future residents
- Exposure Likelihood - High

# Programmatic Considerations

- Opportunity - use existing engineering controls for source containment.

*High return on investment!*

- EPA Removal already heavily invested in OU 1 repairs and upgrades - **\$1,180,000**
- Beneficial reuse of treated groundwater
- State and local community supportive
- CC can be achieved once downgradient plume OU 2 is addressed



# Interim RA Funding Request

|          |                  |
|----------|------------------|
| ■ FY2012 | \$288,000        |
| ■ FY2013 | \$208,000        |
| ■ FY2014 | <u>\$125,000</u> |

**TOTAL      \$621,000**

**Funding for this Interim RA is only through Q2/FY2014.  
Final RA (start Q2/FY2014) will include the Interim RA  
components.**